

## CLAIMS

*Sub A*  
1. A method for fabricating an implantable device,  
the method comprising:

5 fabricating an approximate replica of the bone-  
like structure by sequentially solidifying  
adjoining, cross-sectional intervals of a fluid  
material along an axis.

10 2. A method in accordance with claim 1 wherein a  
design data base is first generated by scanning at  
least a portion of an animal's body using imaging  
techniques to generate a design base of measurement  
data representing size and shape of the bone-like  
tissue in a three dimensional coordinate system and  
then fabricating said replica in correspondence with  
the data in said design data base.

3. A method in accordance with claim 1 wherein the fluid material comprises ceramic particles.

4. A method in accordance with claim 1 wherein the scanning step comprises generating the data base by scanning a body part of a healthy individual animal and archiving the data base for subsequent use.

5. A method in accordance with claim 4 wherein the method further comprises modifying the data base to make selected changes in the size and shape of the hard tissue represented by the data base.

6. A method in accordance with claim 1 wherein the *Step of solidifying a* *comprises bonding* fluid material is, a photo-active polymeric material.

7. A method in accordance with claim 1 wherein the *Step of solidifying a* *sintering* fluid material comprises ceramic particles which are *sintered*.

8. A method in accordance with claim 1 wherein the *Step of solidifying a* *bonding* *a first ceramic material* *particles of* fluid material comprises particles which are cemented together with a second ceramic material.

KREMBLAS,

FOSTER & MILLARD

ATTORNEYS AT LAW

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7632 SLATE RIDGE BLVD.  
COLUMBUS, OH 43068

(614) 575-2100

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9. A method in accordance with claim 1 wherein the fluid material comprises particles which are cemented together with a polymer.

5 10. A method in accordance with claim 1 wherein the fluid material comprises ceramic particles suspended in a liquid monomer and wherein the monomer is polymerized to form a solid polymer network and wherein at least a part of the polymer is then removed.

10 15 11. A method in accordance with claim 1 wherein the fluid material comprises ceramic particles and wherein the solidified replica is then reacted with an agent to change its composition.

15 20 12. A customized implantable device prepared by the method of claim 1.

13. A customized implantable device prepared by the method of claim 2.

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